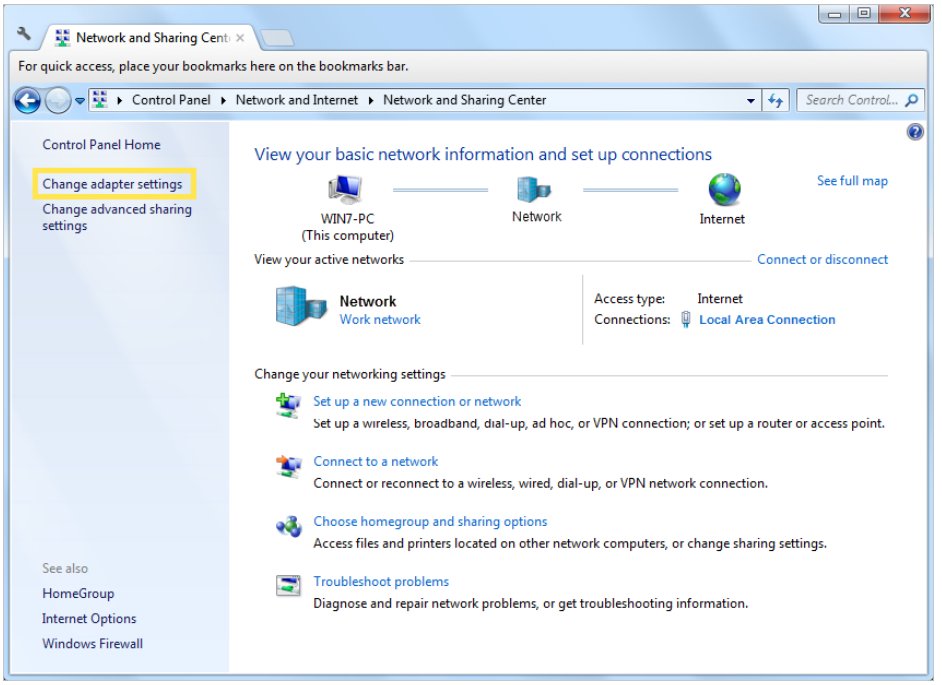
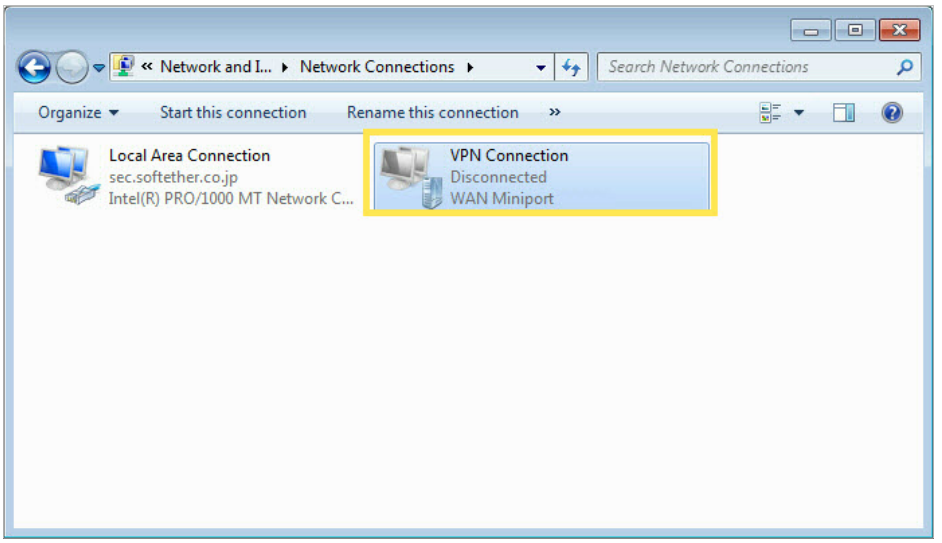
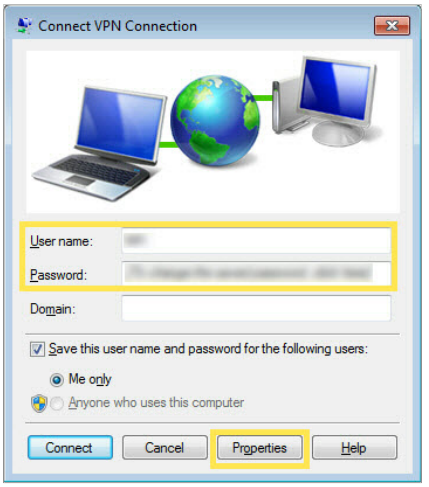


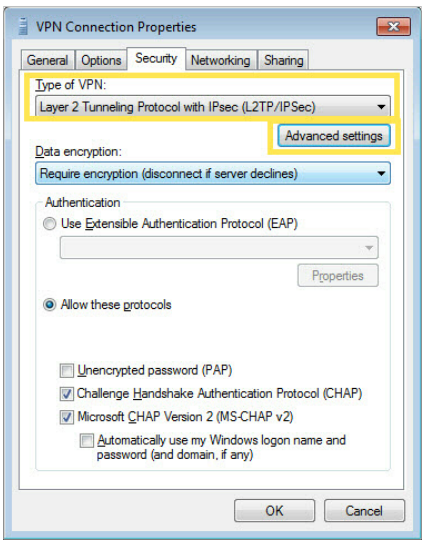
9. Find the VPN connection you created, then double-click it.



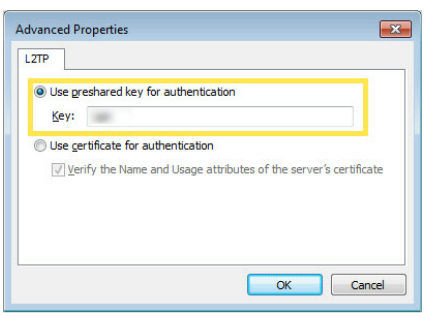
10. Enter the User name and Password you have set for the L2TP/IPSec VPN server on your router, and click Properties.



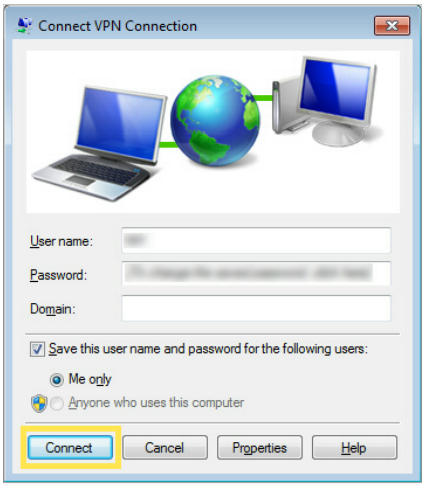
11. Switch to the Security tab, select Layer 2 Tunneling Protocol with IPsec (L2TP/IPSec) and click Advanced settings.



12. Select Use preshared key for authentication and enter the IPSec Pre-Shared Key you have set for the L2TP/IPSec VPN server on your router. Then click OK.



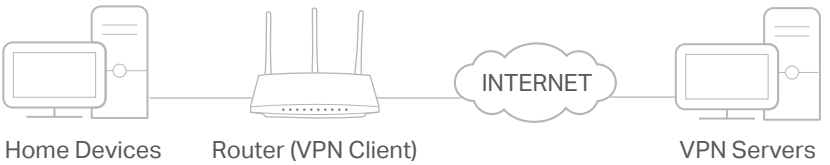
Done! Click Connect to start VPN connection.



15. 4. Use VPN Client to Access a Remote VPN Server

VPN Client is used to create VPN connections for devices in your home network to access a remote VPN server.

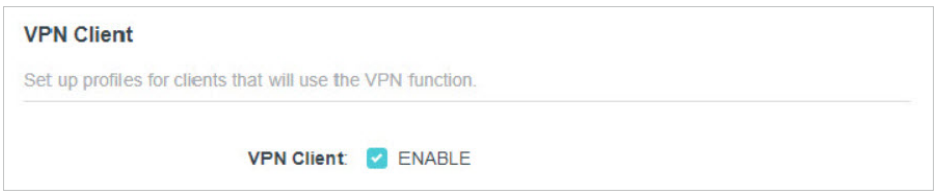
To use the VPN feature, simply configure a VPN connection and choose your desired devices on your router, then these devices can access the remote VPN server. Please follow the steps below:



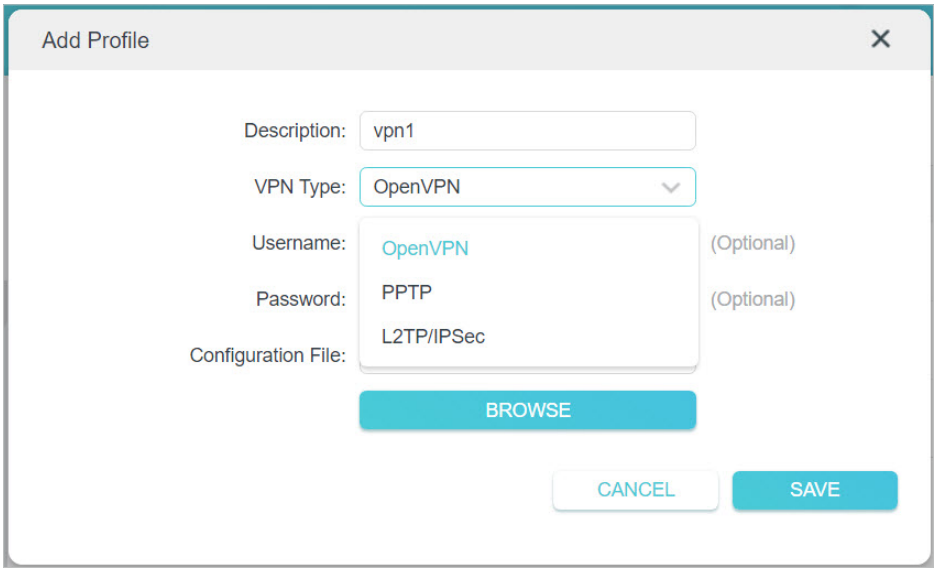
1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > VPN Client.

Note: Firmware update may be required to support VPN Client.

3. Enable VPN Client, then save the settings.

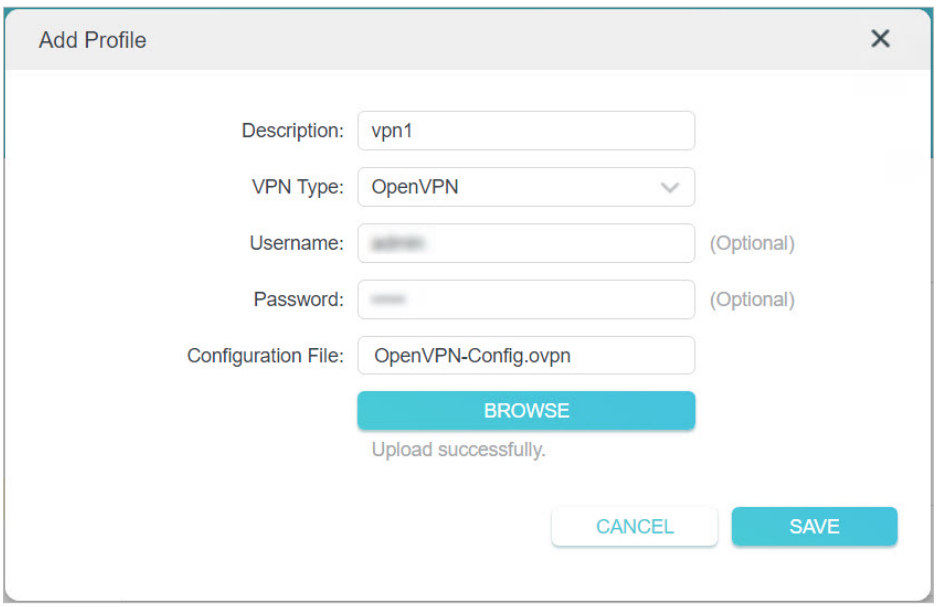


4. Add VPN servers, and enable the one you need.
   1) In the Server List section, click Add.
   2) Specify a description for the VPN, and choose the VPN type.

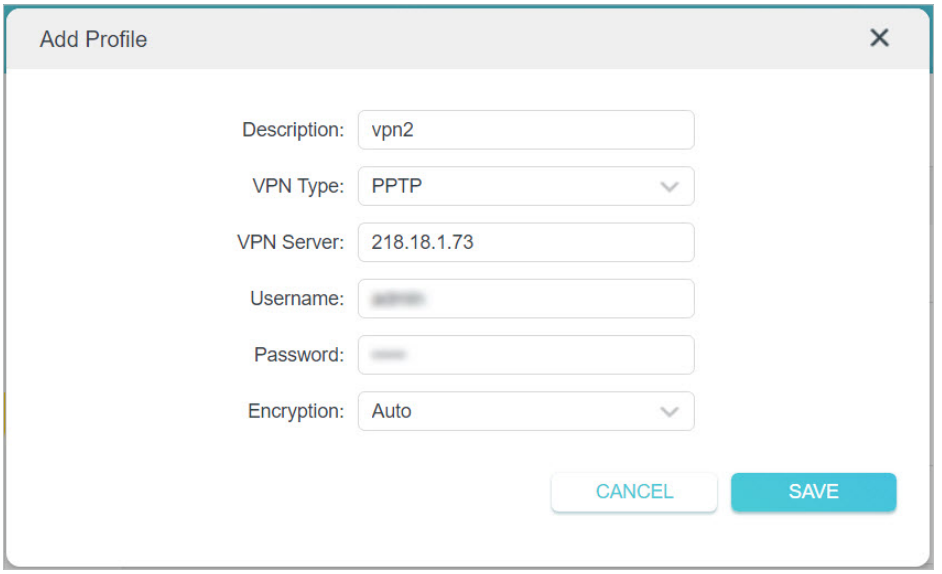


3) Enter the VPN information provided by your VPN provider.

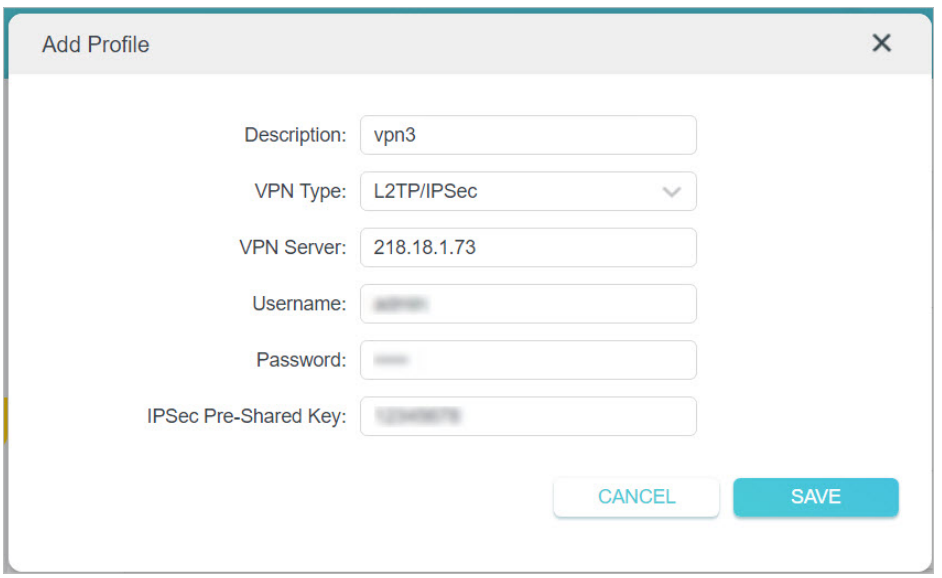
- OpenVPN: Enter the VPN username and password if required by your VPN provider, otherwise simply leave them empty. Then import the configuration file provided by your VPN provider.



- PPTP: Enter the VPN server address (for example: 218.18.1.73) and the VPN username and password provided by your VPN provider.

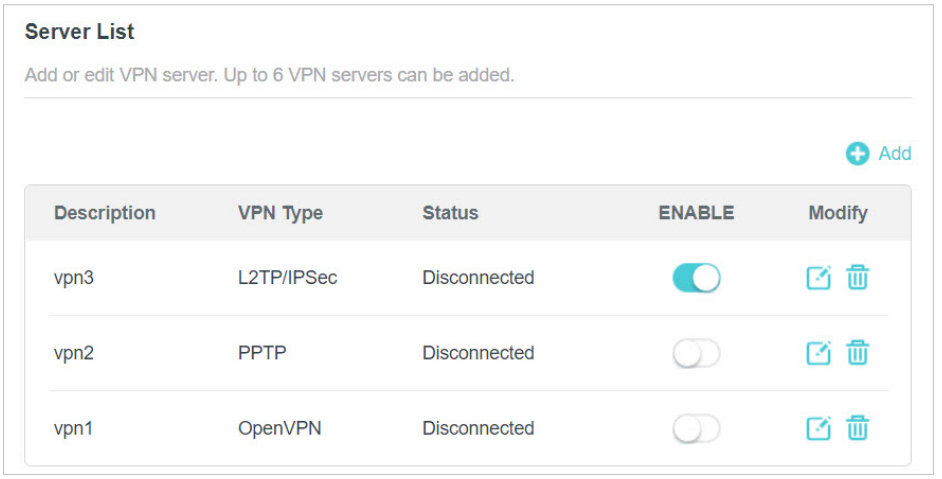


- L2TP/IPSec VPN: Enter the VPN server address (for example: 218.18.1.73), VPN username and password, and IPSec pre-shared key provided by your VPN provider.



4) Save the settings.

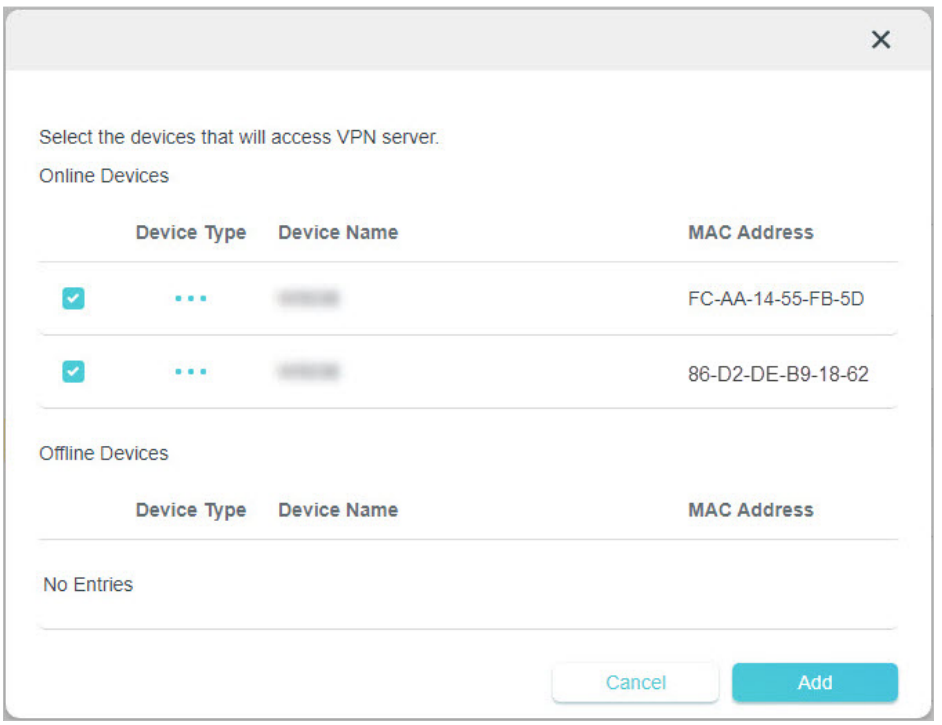
5) In the server list, enable the one you need.



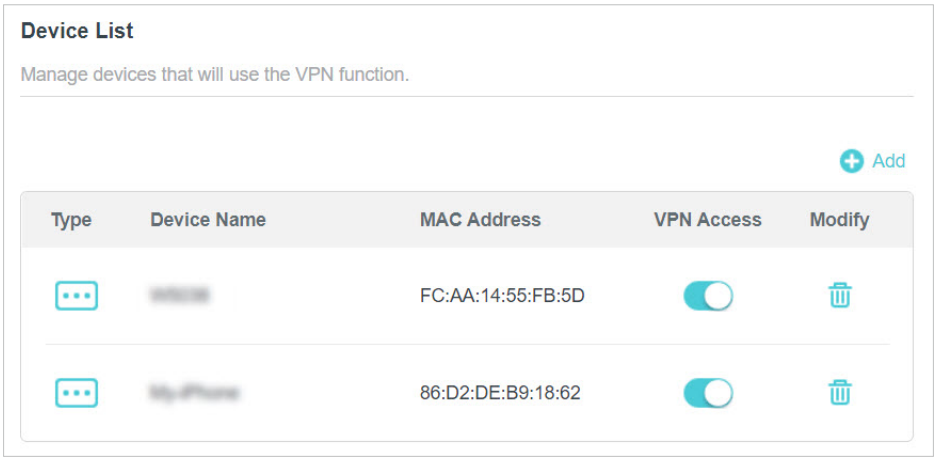
5. Add and manage the devices that will use the VPN function.

1) In the Device List section, click Add.

2) Choose and add the devices that will access the VPN server you have configured.



6. Save the settings.



Done! Now the devices you specified can access the VPN server you enabled.

Chapter 16

Customize Your Network Settings

This chapter guides you on how to configure advanced network features.

It contains the following sections:

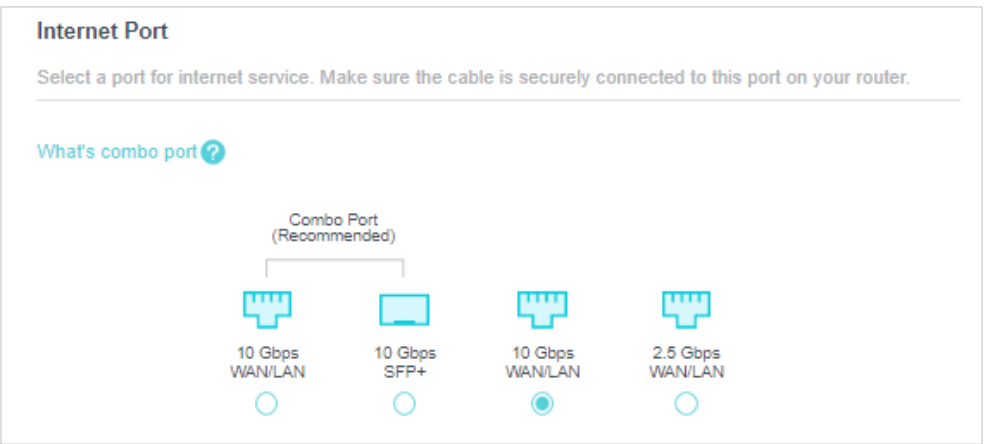
- Change the Internet Settings
- Change the LAN Settings
- Configure to Support IPTV Service
- Specify DHCP Server Settings
- Set Up a Dynamic DNS Service Account
- Create Static Routes

16. 1. Change the Internet Settings

After setting up your internet, you can also easily change the internet settings if needed in the future.

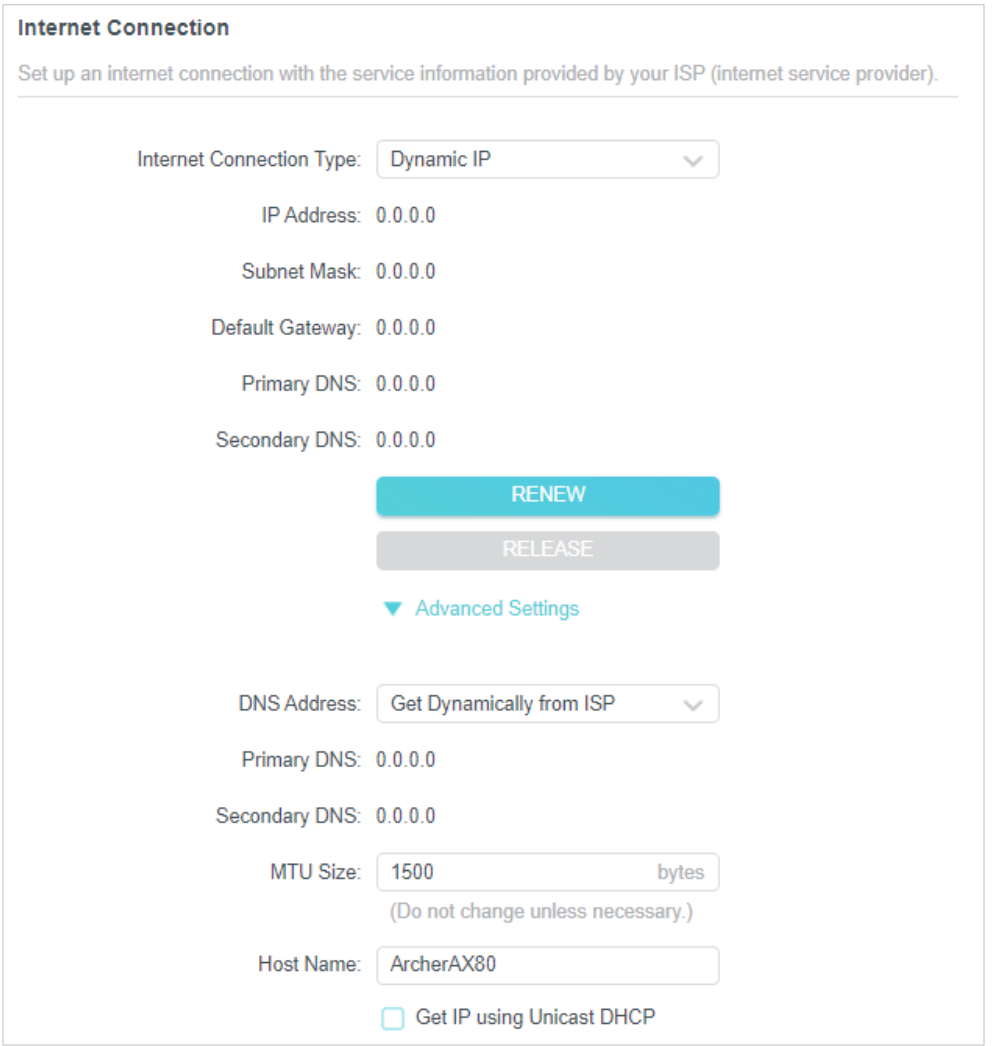
1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > Network > Internet.

- **To change the internet port:**



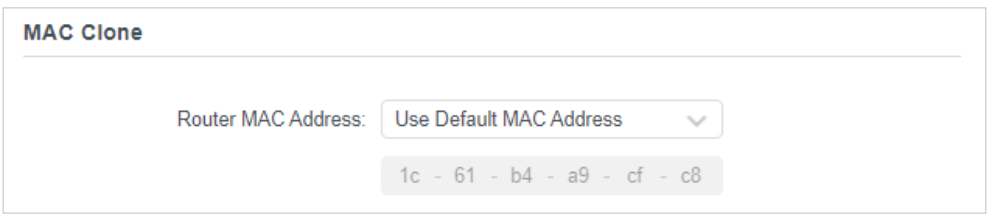
1. Select the desired internet port. Make sure the cable is securely connected to this port on your router.
2. Click SAVE.

- **To change the internet connection settings:**



1. Select the internet connection type and configure the settings according to the information provided by your ISP.
2. Optional. Reveal the advanced settings and change the settings if needed. It's recommended to keep the default settings.
3. Click SAVE.

- **To change the MAC address of the router:**



You have three options, Use Default MAC Address, Clone Current Device MAC, Use Custom MAC Address.

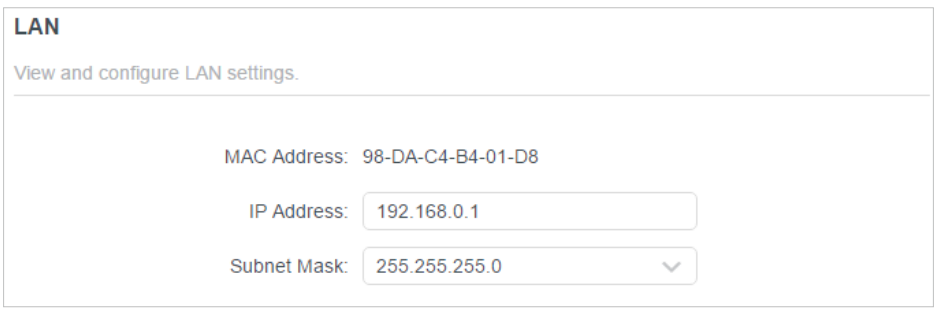
- **To change the Internet Port Negotiation Speed Setting**

You can change the internet port speed mode. Auto Negotiation is recommended.

16. 2. Change the LAN Settings

The router is preset with a default LAN IP 192.168.0.1, which you can use to log in to its web management page. The LAN IP address together with the Subnet Mask also defines the subnet that the connected devices are on. If the IP address conflicts with another device on your local network or your network requires a specific IP subnet, you can change it.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > Network > LAN.
3. Type in a new IP Address appropriate to your needs. And leave the Subnet Mask as the default settings.



4. Click SAVE.

Note: If you have set the Port Forwarding, DMZ or DHCP address reservation, and the new LAN IP address is not in the same subnet with the old one, then you should reconfigure these features.

16. 3. Configure to Support IPTV Service

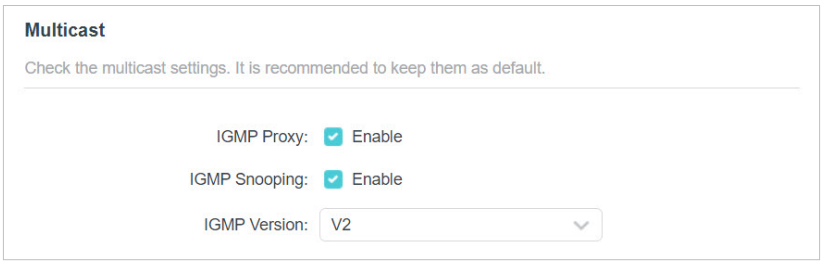
I want to:

Configure IPTV setup to enable Internet/IPTV/Phone service provided by my internet service provider (ISP).

How can I do that?

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > Network > IPTV/VLAN.
3. **If your ISP provides the networking service based on IGMP technology**, e.g., British Telecom(BT) and Talk Talk in UK:

   1) Tick the IGMP Proxy and IGMP Snooping checkbox, then select the IGMP Version, either V2 or V3, as required by your ISP.



   2) Click SAVE.

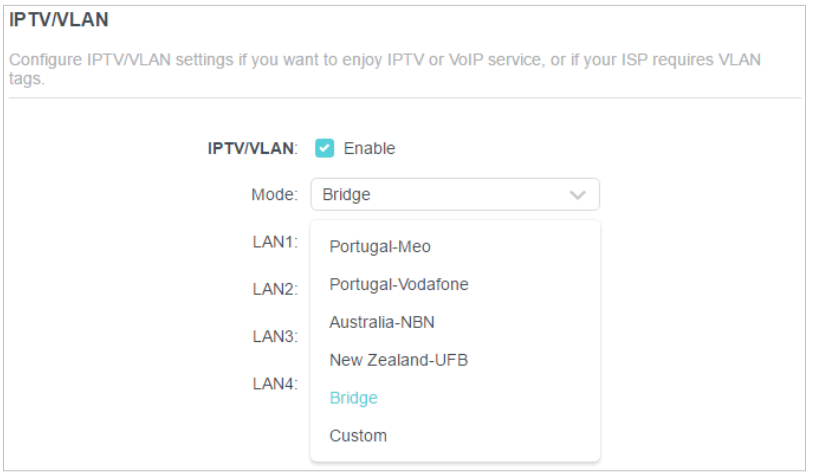
   3) After configuring IGMP proxy, IPTV can work behind your router now. You can connect your set-top box to any of the router's Ethernet port.

   If IGMP is not the technology your ISP applies to provide IPTV service:

   1) Tick Enable IPTV/VLAN.

   2) Select the appropriate Mode according to your ISP.

   - Select Bridge if your ISP is not listed and no other parameters are required.
   - Select Custom if your ISP is not listed but provides necessary parameters.



   3) After you have selected a mode, the necessary parameters, including the LAN port for IPTV connection, are predetermined. If not, select the LAN type to determine which port is used to support IPTV service.

   4) Click SAVE.

5) Connect the set-top box to the corresponding LAN port which is predetermined or you have specified in Step 3.

Done!

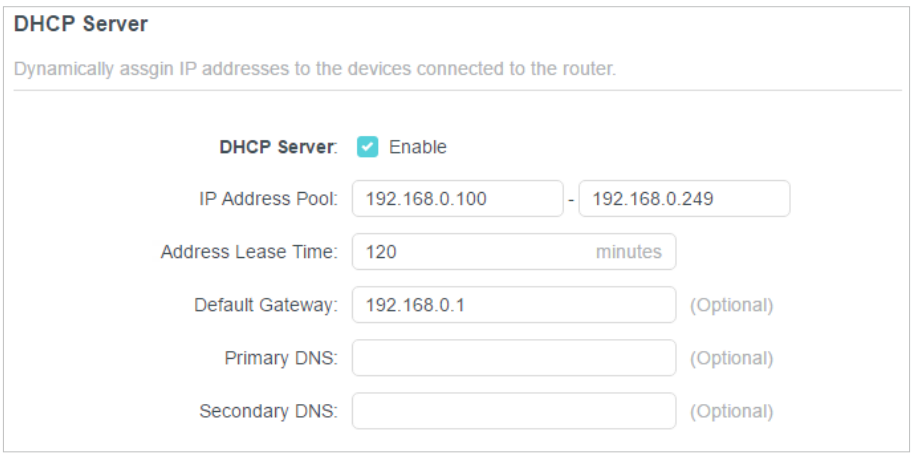
Your IPTV setup is done now! You may need to configure your set-top box before enjoying your TV.

16. 4. Specify DHCP Server Settings

By default, the DHCP (Dynamic Host Configuration Protocol) Server is enabled and the router acts as a DHCP server; it dynamically assigns TCP/IP parameters to client devices from the IP Address Pool. You can change the settings of the DHCP Server if necessary, and you can reserve LAN IP addresses for specified client devices.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > Network > DHCP Server.

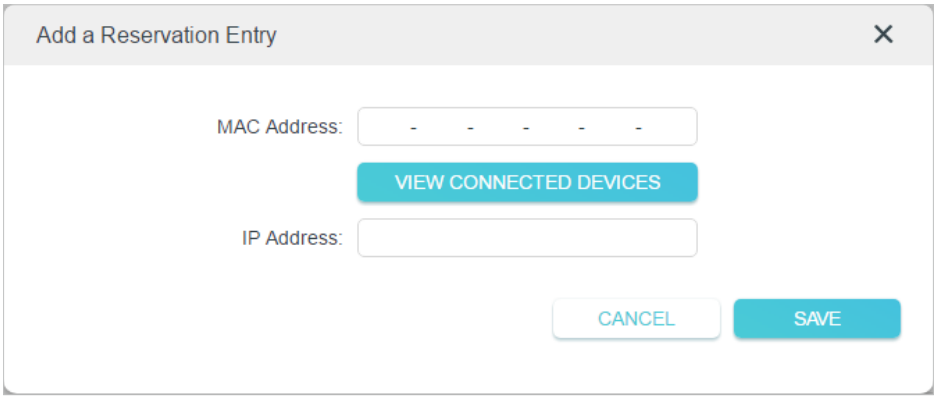
- **To specify the IP address that the router assigns:**



1. Tick the Enable checkbox.
2. Enter the starting and ending IP addresses in the IP Address Pool.
3. Enter other parameters if the ISP offers. The Default Gateway is automatically filled in and is the same as the LAN IP address of the router.
4. Click SAVE.

- **To reserve an IP address for a specified client device:**

1. Click Add in the Address Reservation section.



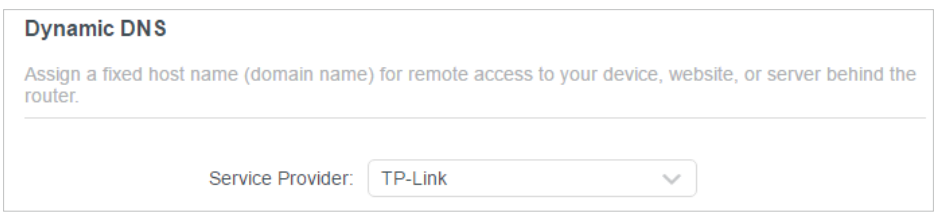
2. Click VIEW CONNECTED DEVICES and select the you device you want to reserve an IP for. Then the MAC Address will be automatically filled in. Or enter the MAC address of the client device manually.
3. Enter the IP address to reserve for the client device.
4. Click SAVE.

16. 5. Set Up a Dynamic DNS Service Account

Most ISPs assign a dynamic IP address to the router and you can use this IP address to access your router remotely. However, the IP address can change from time to time and you don't know when it changes. In this case, you might apply the DDNS (Dynamic Domain Name Server) feature on the router to allow you and your friends to access your router and local servers (FTP, HTTP, etc.) using a domain name without checking and remembering the IP address.

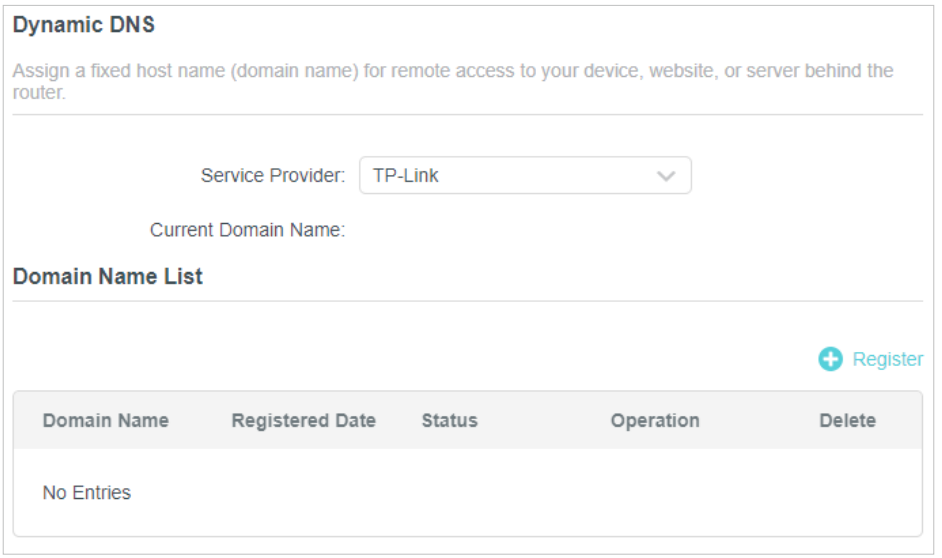
Note: DDNS does not work if the ISP assigns a private WAN IP address (such as 192.168.1.x) to the router.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > Network > Dynamic DNS.
3. Select the DDNS Service Provider: TP-Link, NO-IP or DynDNS. It is recommended to select TP-Link so that you can enjoy TP-Link's superior DDNS service. Otherwise, please select NO-IP or DynDNS. If you don't have a DDNS account, you have to register first by clicking Register Now.

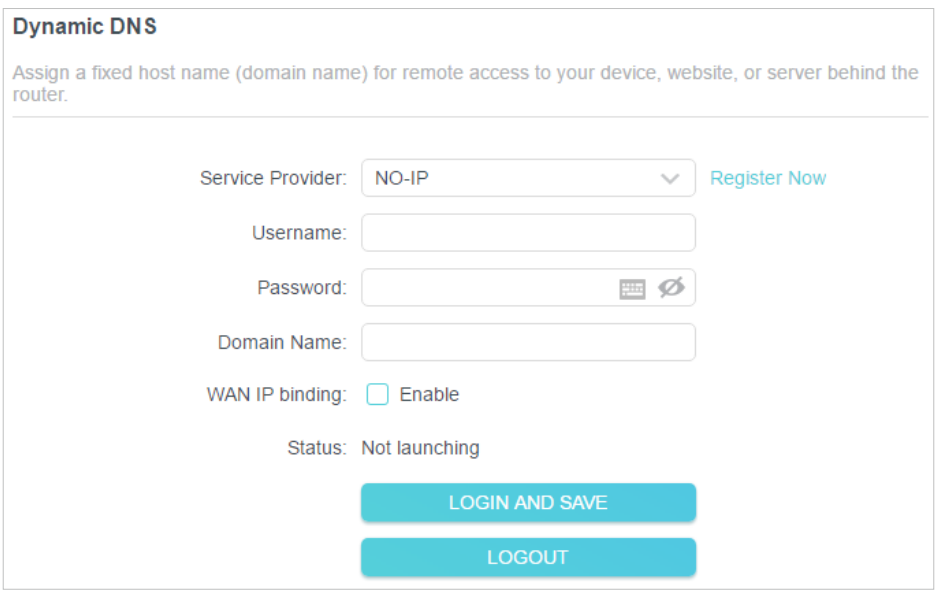


Note: To enjoy TP-Link's DDNS service, you have to log in with a TP-Link ID. If you have not logged in with one, click log in.

4. Click Register in the Domain Name List if you have selected TP-Link, and enter the Domain Name as needed.



If you have selected NO-IP or DynDNS, enter the username, password and domain name of your account.



5. Click LOGIN AND SAVE.

Tips: If you want to use a new DDNS account, please click Logout first, and then log in with a new account.

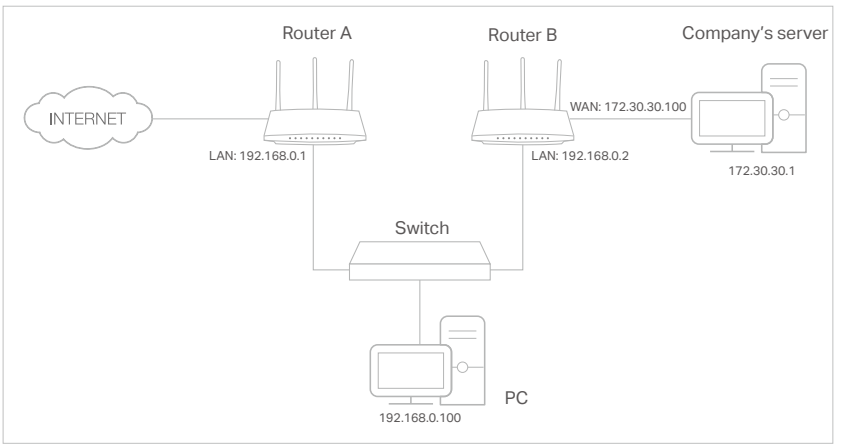
16. 6. Create Static Routes

Static routing is a form of routing that is configured manually by a network administrator or a user by adding entries into a routing table. The manually-configured routing information guides the router in forwarding data packets to the specific destination.

I want to:

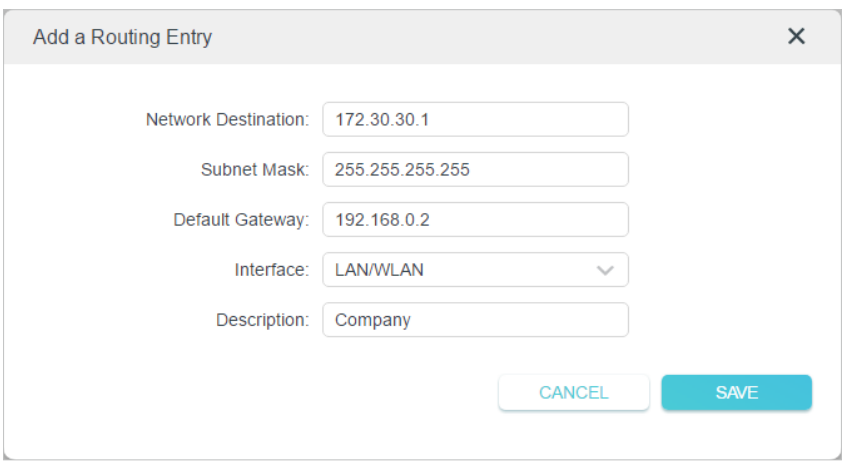
Visit multiple networks and servers at the same time.

For example, in a small office, my PC can surf the internet through Router A, but I also want to visit my company's network. Now I have a switch and Router B. I connect the devices as shown in the following figure so that the physical connection between my PC and my company's server is established. To surf the internet and visit my company's network at the same time, I need to configure the static routing.



How can I do that?

1. Change the routers' LAN IP addresses to two different IP addresses on the same subnet. Disable Router B's DHCP function.
2. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for Router A.
3. Go to Advanced > Network > Routing.
4. Click Add and finish the settings according to the following explanations:



Network Destination: The destination IP address that you want to assign to a static

route. This IP address cannot be on the same subnet with the WAN IP or LAN IP of Router A. In the example, the IP address of the company network is the destination IP address, so here enter 172.30.30.1.

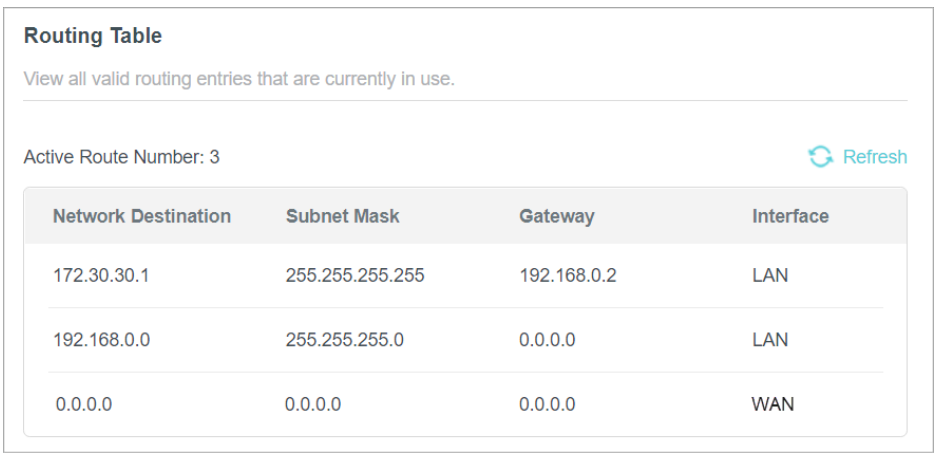
Subnet Mask: Determines the destination network with the destination IP address. If the destination is a single IP address, enter 255.255.255.255; otherwise, enter the subnet mask of the corresponding network IP. In the example, the destination network is a single IP, so here enter 255.255.255.255.

Default Gateway: The IP address of the gateway device to which the data packets will be sent. This IP address must be on the same subnet with the router's IP which sends out data. In the example, the data packets will be sent to the LAN port of Router B and then to the Server, so the default gateway should be 192.168.0.2.

Interface: Determined by the port (WAN/LAN) that sends out data packets. In the example, the data are sent to the gateway through the LAN port of Router A, so LAN/WLAN should be selected.

Description: Enter a description for this static routing entry.

5. Click SAVE.
6. Check the Routing Table below. If you can find the entry you've set, the static routing is set successfully.



Network Destination	Subnet Mask	Gateway	Interface
172.30.30.1	255.255.255.255	192.168.0.2	LAN
192.168.0.0	255.255.255.0	0.0.0.0	LAN
0.0.0.0	0.0.0.0	0.0.0.0	WAN

Done!

Open a web browser on your PC. Enter the company server's IP address to visit the company network.

Chapter 17

Manage the Router

This chapter will show you the configuration for managing and maintaining your router.

It contains the following sections:

- Update the Firmware
- Backup and Restore Configuration Settings
- Change the Login Password
- Password Recovery
- Local Management
- Remote Management
- System Log
- Test the Network Connectivity
- Set System Time and Language
- Set the Router to Reboot Regularly
- Control the LED
- Volume Control

17. 1. Update the Firmware

TP-Link aims at providing better network experience for users.

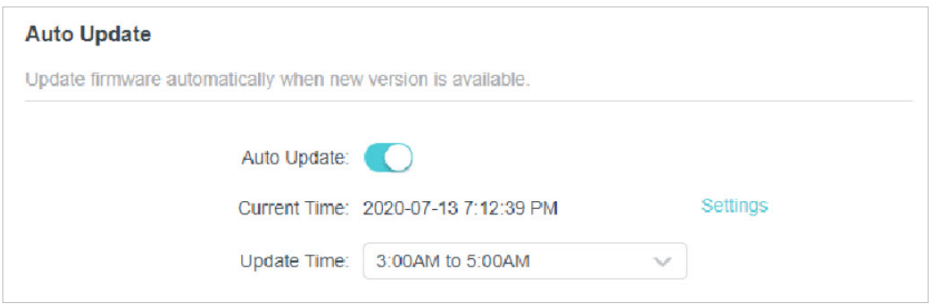
We will inform you through the web management page if there's any new firmware available for your router. Also, the latest firmware will be released at the TP-Link official website www.tp-link.com, and you can download it from the Support page for free.

Note:

- Back up your router's configurations before firmware update.
- Do NOT turn off the router during the firmware update.

17. 1. 1. Auto Update

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > System > Firmware Update.
3. Enable Auto Update.



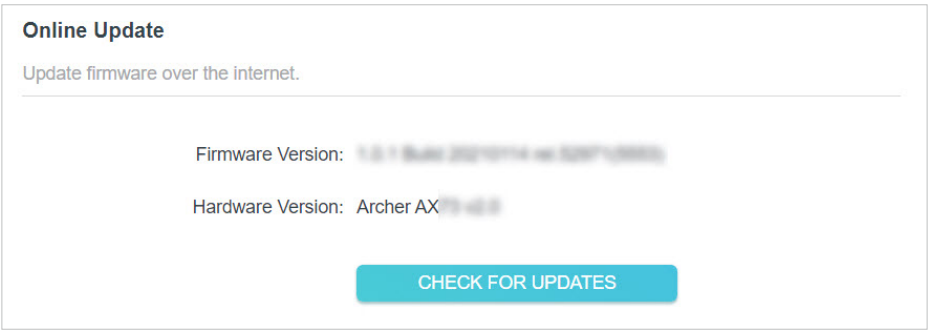
4. Specify the Update Time and save the settings.

The router will update firmware automatically at the specified time when new version is available.

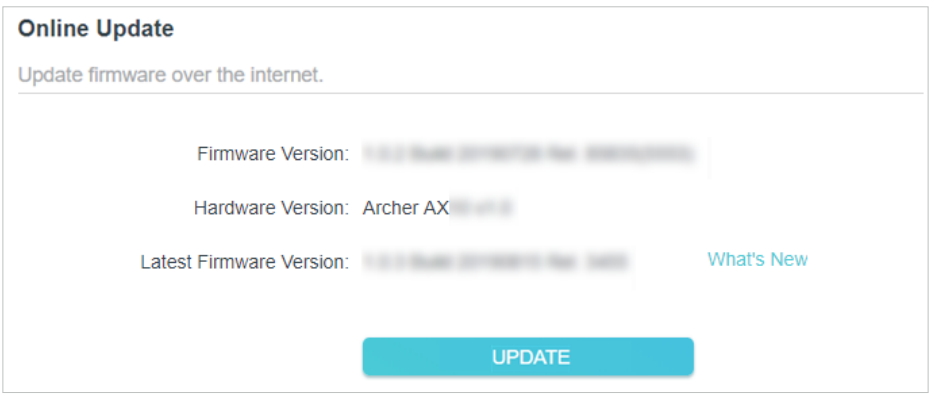
17. 1. 2. Online Update

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. When the latest firmware is available for your router, the update icon will display in the top-right corner of the page. Click the icon to go to the Firmware Update page.

   Alternatively, you can go to Advanced > System > Firmware Update, and click CHECK FOR UPDATES to see whether the latest firmware is released.



3. Focus on the Online Update section, and click UPDATE if there is new firmware.

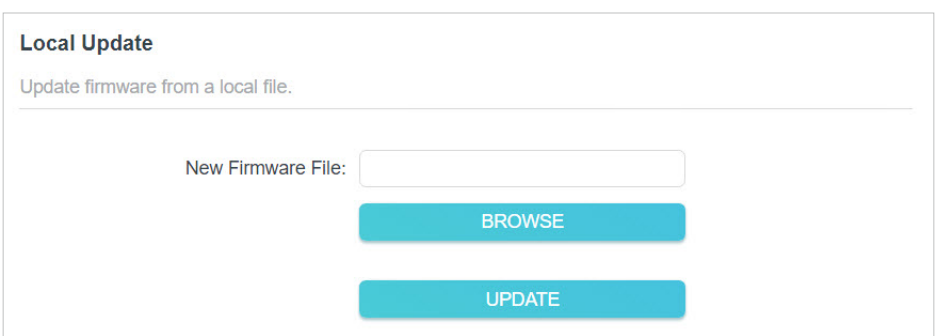


4. Wait a few minutes for the update and reboot to complete.

Tips: If there's a new and important firmware update for your router, you will see the prompt notification on your computer as long as a web browser is opened. Click to update, and log in to the web management page with the username and password you set for the router. You will see the Firmware Update page.

17. 1. 3. Local Update

1. Download the latest firmware file for the router from www.tp-link.com.
2. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
3. Go to Advanced > System > Firmware Update.
4. Focus on the Local Update section. Click BROWSE to locate the downloaded new firmware file, and click UPDATE.



5. Wait a few minutes for the update and reboot to complete.

Note: If you fail to update the firmware for the router, please contact our Technical Support.

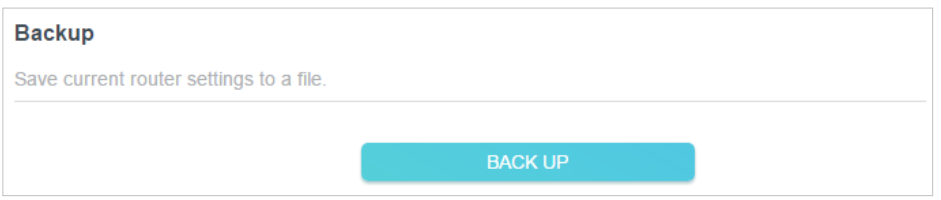
17. 2. Backup and Restore Configuration Settings

The configuration settings are stored as a configuration file in the router. You can backup the configuration file to your computer for future use and restore the router to a previous settings from the backup file when needed. Moreover, if necessary you can erase the current settings and reset the router to the default factory settings.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > System Tools > Backup & Restore.

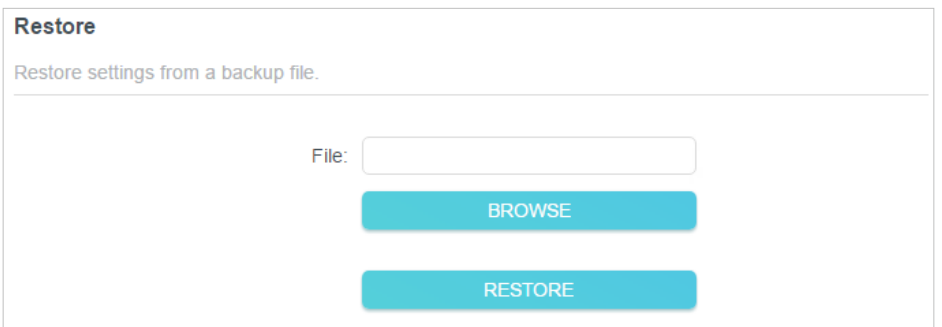
- **To backup configuration settings:**

Click BACK UP to save a copy of the current settings to your local computer. A '.bin' file of the current settings will be stored to your computer.



- **To restore configuration settings:**

1. Click BROWSE to locate the backup configuration file stored on your computer, and click RESTORE.

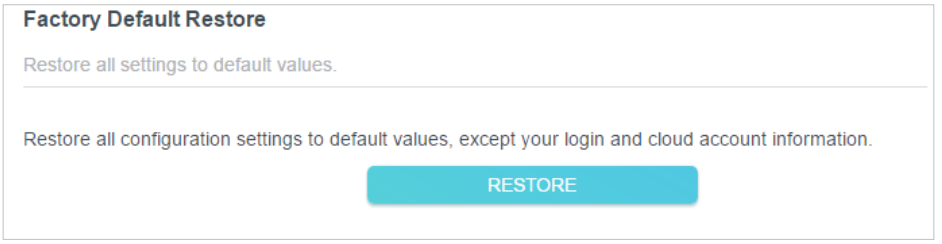


2. Wait a few minutes for the restoring and rebooting.

Note: During the restoring process, do not turn off or reset the router.

- **To reset the router except your login password and TP-Link ID:**

1. In the Factory Default Restore section, click RESTORE.



2. Wait a few minutes for the resetting and rebooting.

Note:
- During the resetting process, do not turn off the router.
- After reset, you can still use the current login password or the TP-Link ID to log in to the web management page.

- **To reset the router to factory default settings:**

1. Click FACTORY RESTORE to reset the router.

2. Wait a few minutes for the resetting and rebooting.

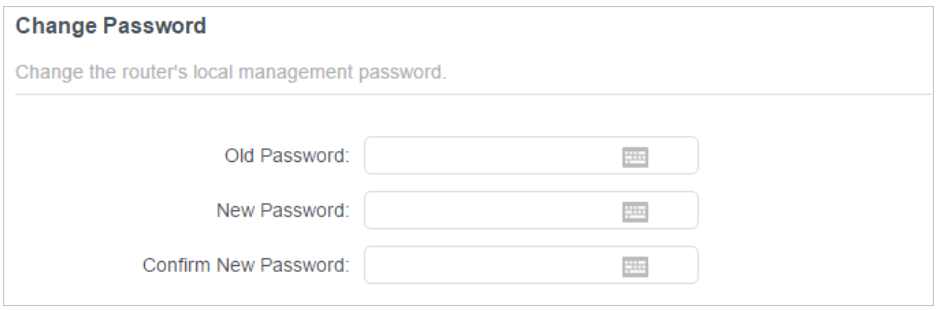
Note:
- During the resetting process, do not turn off or reset the router.
- We strongly recommend you backup the current configuration settings before resetting the router.

17. 3. Change the Login Password

The account management feature allows you to change your login password of the web management page.

Note: If you are using a TP-Link ID to log in to the web management page, the account management feature will be disabled. To manage the TP-Link ID, go to Advanced > TP-Link ID.

1. Visit http://tplinkwifi.net, and log in with the password you set for the router.
2. Go to Advanced > System > Administration and focus on the Change Password section.



3. Enter the old password, then a new password twice (both case-sensitive). Click SAVE.

4. Use the new password for future logins.

17. 4. Password Recovery

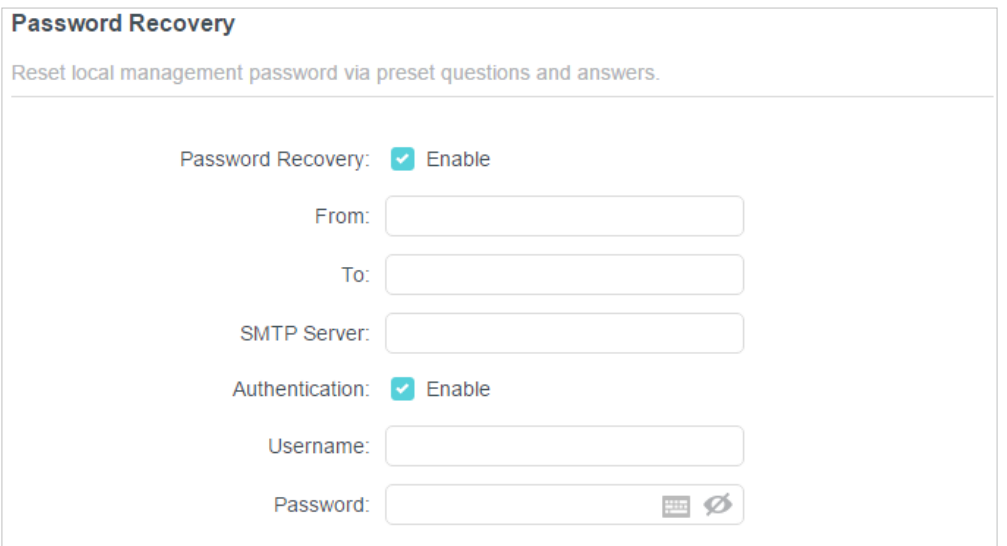
This feature allows you to recover the login password you set for you router in case you forget it.

Note: If you are using a TP-Link ID to log in to the web management page, the Password Recovery feature will be disabled. To manage the TP-Link ID, go to Advanced > TP-Link ID.

1. Visit http://tplinkwifi.net, and log in with the password you set for the router.
2. Go to Advanced > System > Administration and focus on the Password Recovery section.
3. Tick the Enable box of Password Recovery.
4. Specify a mailbox (From) for sending the recovery letter and enter its SMTP Server address. Specify a mailbox (To) for receiving the recovery letter. If the mailbox (From) to send the recovery letter requires encryption, Tick the Enable box of Authentication and enter its username and password.

Tips:

- SMTP server is available for users in most webmail systems. For example, the SMTP server address of Gmail is smtp.gmail.com.
- Generally, Authentication should be enabled if the login of the mailbox requires username and password.



5. Click SAVE.

To recover the login password, please visit http://tplinkwifi.net, click Forgot Password? on the login page and follow the instructions to set a new password.

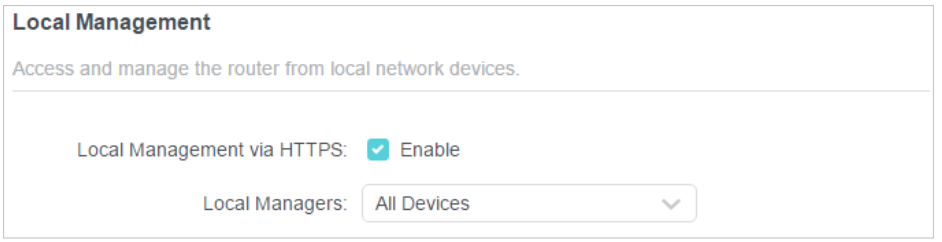
17. 5. Local Management

This feature allows you to limit the number of client devices on your LAN from accessing the router by using the MAC address-based authentication.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > System > Administration and complete the settings In Local Management section as needed.

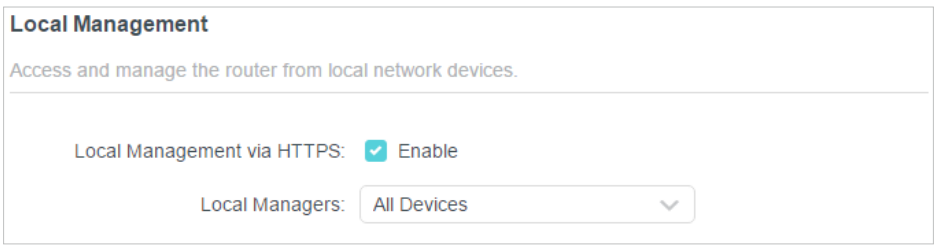
- **Access the router via HTTPS and HTTP:**

Tick the Enable box of Local Management via HTTPS to access the router via HTTPS and HTTP, or keep it disabled to access the router only via HTTP.



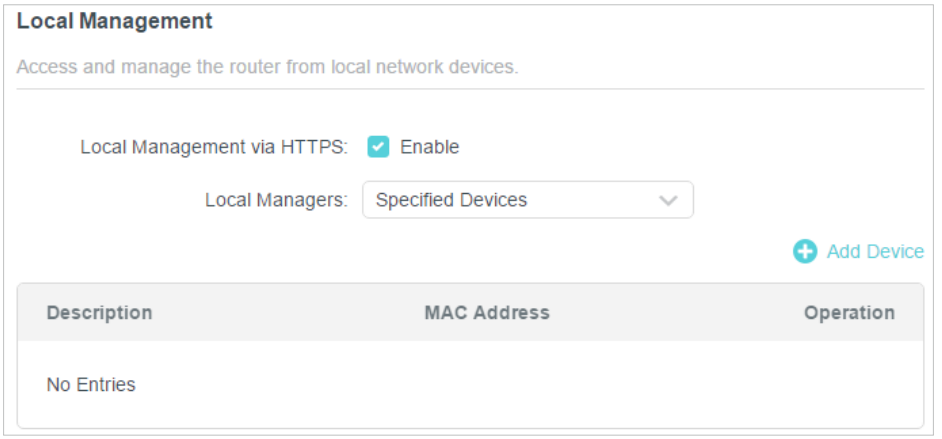
- **Allow all LAN connected devices to manage the router:**

Select All Devices for Local Managers.

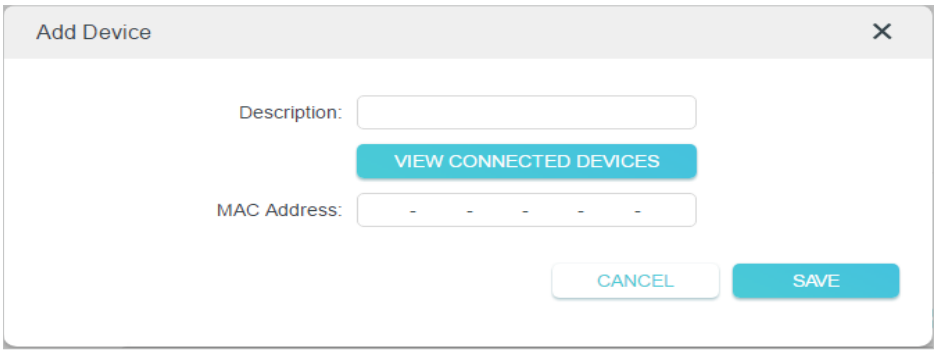


- **Allow specific devices to manage the router:**

1. Select All Devices for Local Managers and click SAVE.



2. Click Add Device.



3. Click VIEW CONNECTED DEVICES and select the device to manage the router from the Connected Devices list, or enter the MAC address of the device manually.
4. Specify a Description for this entry.
5. Click SAVE.

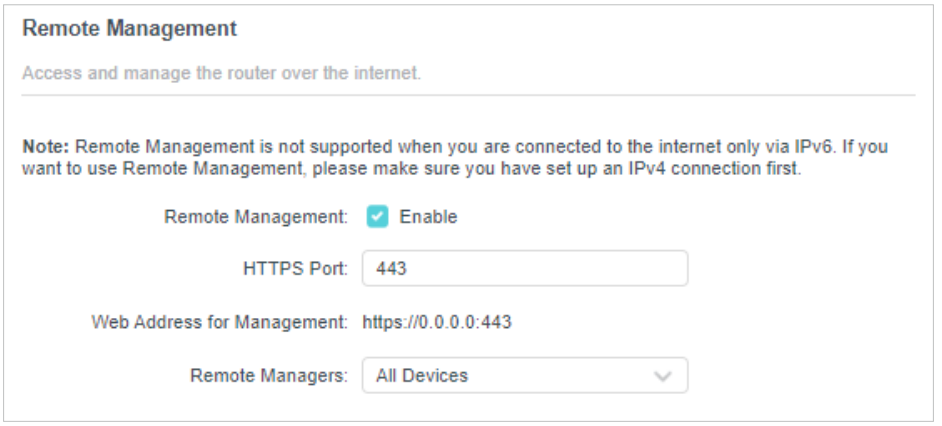
17. 6. Remote Management

This feature allows you to control remote devices' authority to manage the router.

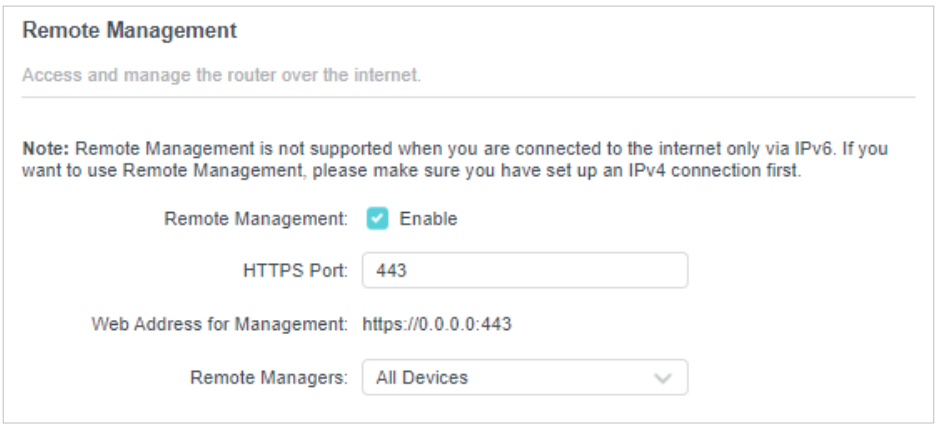
1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > System > Administration and complete the settings in Remote Management section as needed.

- **Forbid all devices to manage the router remotely:**

Do not tick the Enable checkbox of Remote Management.



- **Allow all devices to manage the router remotely:**

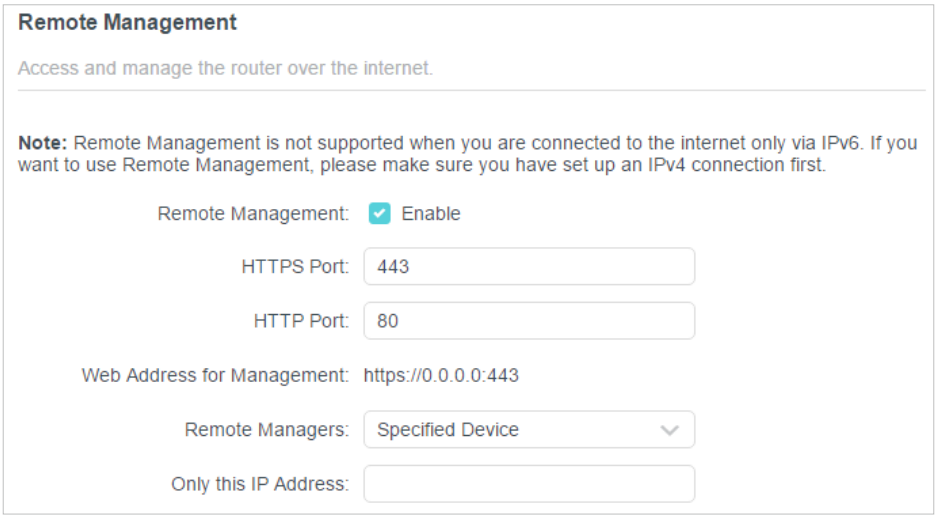


1. Tick the Enable checkbox of Remote Management.
2. Keep the HTTPS port as default settings (recommended) or enter a value between 1024 and 65535.
3. Select All Devices for Specified Devices.
4. Click SAVE.

Devices on the internet can log in to https://Router's WAN IP address:port number (such as https://113.116.60.229:1024) to manage the router.

Tips:
- You can find the WAN IP address of the router on Network Map > Internet.
- The router's WAN IP is usually a dynamic IP. Please refer to Set Up a Dynamic DNS Service Account if you want to log in to the router through a domain name.

- **Allow a specific device to manage the router remotely:**



1. Tick the Enable checkbox of Remote Management.
2. Keep the HTTPS and HTTP port as default settings (recommended) or enter a value between 1024 and 65535.
3. Select Specified Device for Remote Managers.
4. In the Only this IP Address field, enter the IP address of the remote device to manage the router.
5. Click SAVE.

Devices using this WAN IP can manage the router by logging in to http://Router's WAN IP:port number (such as http://113.116.60.229:1024).

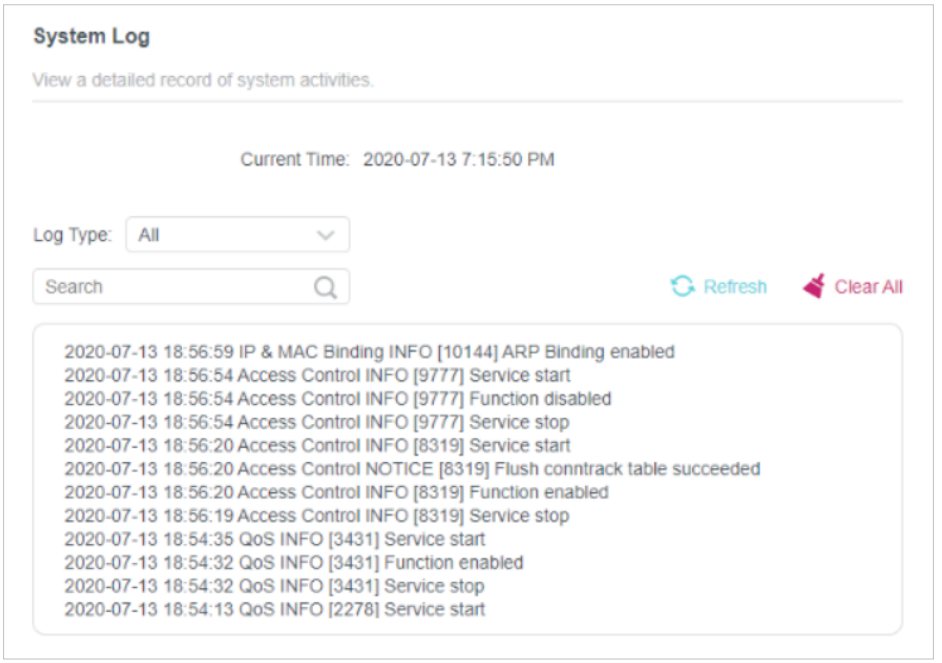
Tips: The router's WAN IP is usually a dynamic IP. Please refer to Set Up a Dynamic DNS Service Account if you want to log in to the router through a domain name.

17. 7. System Log

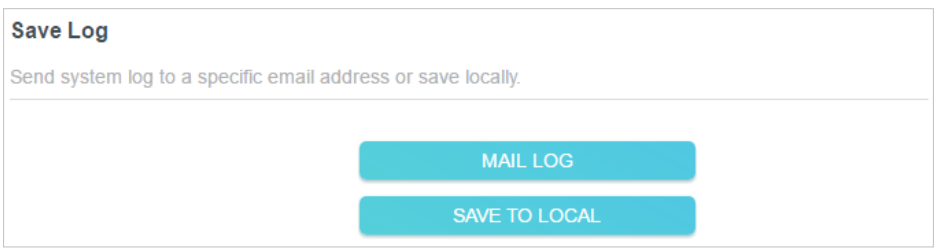
When the router does not work normally, you can save the system log and send it to the technical support for troubleshooting.

- **To save the system log locally:**

1. Visit http://tplinkwifi.net, and log in your TP-Link ID or the password you set for the router.
2. Go to Advanced > System > System Log.
3. Choose the type and level of the system logs as needed.



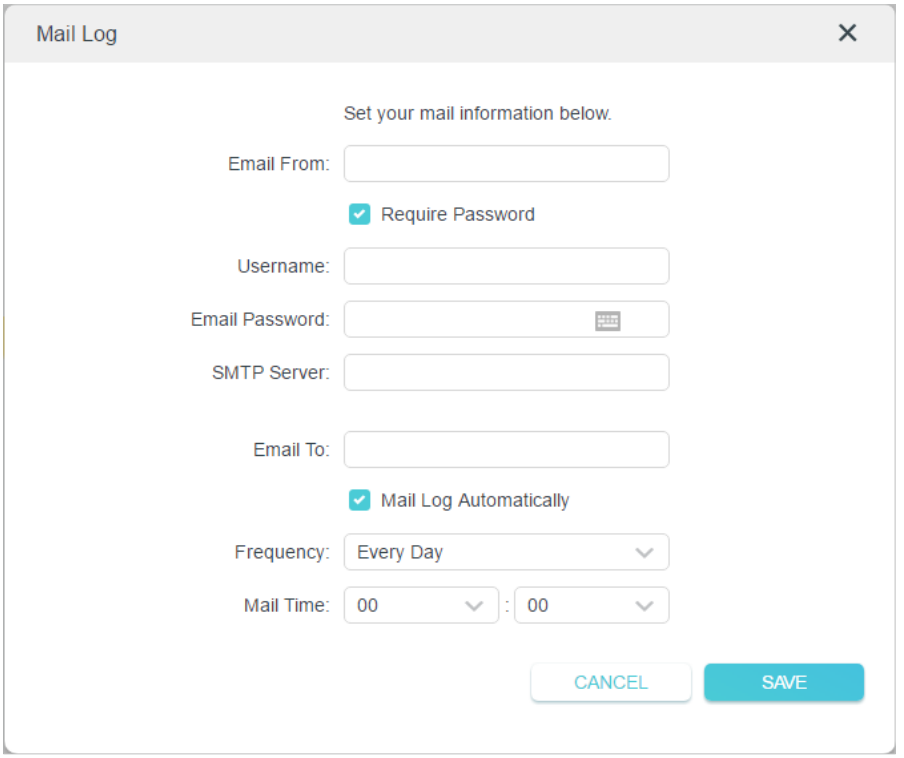
4. In the Save Log section, click SAVE TO LOCAL to save the system logs to a local disk.



- **To send the system log to a mailbox at a fixed time:**

For example, I want to check my router's working status at a fixed time every day, however, it's too troublesome to log in to the web management page every time I want to go checking. It would be great if the system logs could be sent to my mailbox at 8 a.m. every day.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > System Tools > System Log.
3. In the Save Log section, click MAIL LOG.
4. Enter the information required:



1) Email From: Enter the email address used for sending the system log.

2) Select Require Password.

Tips: Generally, Require Password should be selected if the login of the mailbox requires username and password.

3) Username: Enter the email address used for sending the system log.

4) Email Password: Enter the password to login the sender's email address.

5) SMTP Server: Enter the SMTP server address.

Tips: SMTP server is available for users in most webmail systems. For example, the SMTP server address of Hotmail is smtp-mail.outlook.com.

6) Email To: Enter the recipient's email address, which can be the same as or different from the sender's email address.

7) Select Mail Log Automatically.

Tips: The router will send the system log to the designated email address if this option is enabled.

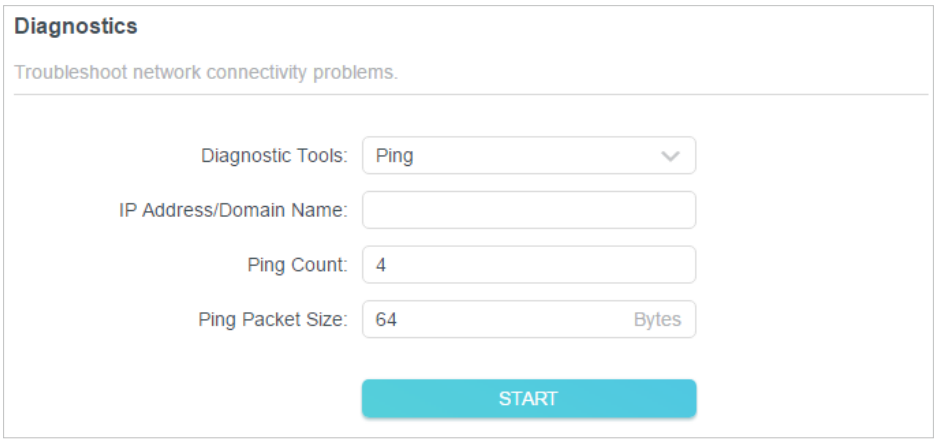
8) Frequency: This determines how often the recipient will receive the system log .

5. Click SAVE.

17. 8. Test the Network Connectivity

Diagnostics is used to test the connectivity between the router and the host or other network devices.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > System > Diagnostics.



3. Enter the information:

1) Choose Ping or Traceroute as the diagnostic tool to test the connectivity;

- Ping is used to test the connectivity between the router and the tested host, and measure the round-trip time.
- Traceroute is used to display the route (path) your router has passed to reach the tested host, and measure transit delays of packets across an Internet Protocol network.

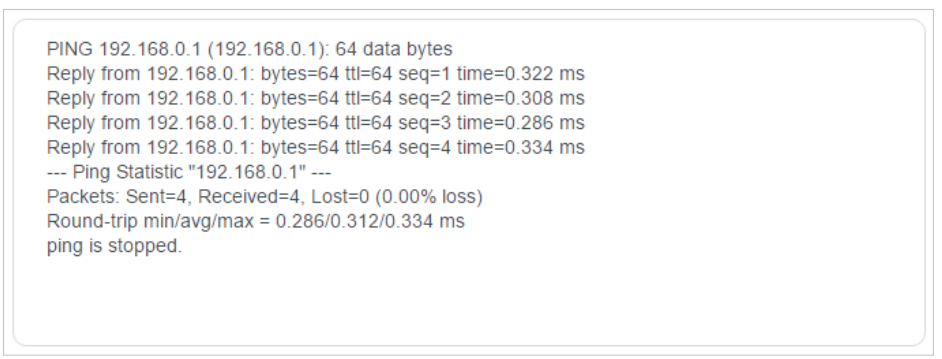
2) Enter the IP Address or Domain Name of the tested host.

3) Modify the Ping Count number and the Ping Packet Size. It's recommended to keep the default value.

4) If you have chosen Traceroute, you can modify the Traceroute Max TTL. It's recommended to keep the default value.

4. Click START to begin the diagnostics.

The figure below indicates the proper connection between the router and the Yahoo server (www.Yahoo.com) tested through Ping.



The figure below indicates the proper connection between the router and the Yahoo server (www.Yahoo.com) tested through Traceroute.

17. 9. Set System Time and Language

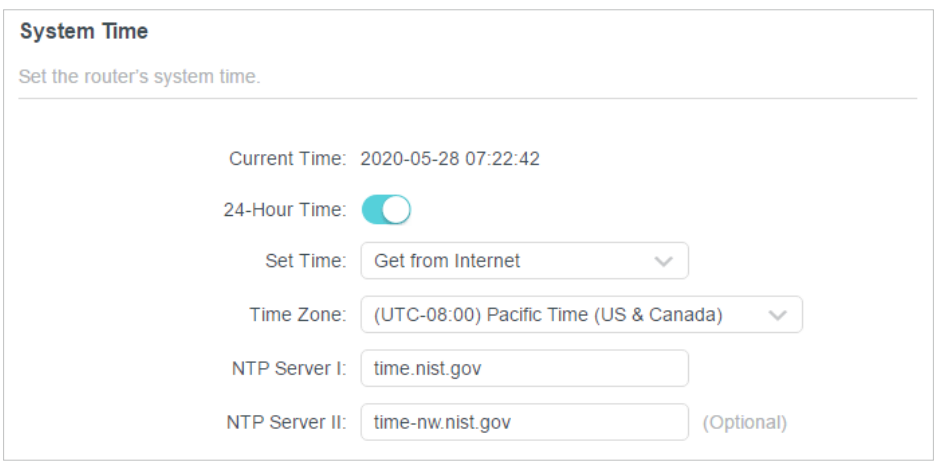
System time is the time displayed while the router is running. The system time you configure here will be used for other time-based functions like Parental Controls. You can choose the way to obtain the system time as needed.

System language is the language displayed when you log into the router. You can change the system language as needed.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > System > Time & Language.

- **To get time from the internet:**

1. Enable 24-Hour Time if you want the time to display in a 24-hour way.
2. In the Set Time field, select Get from Internet.

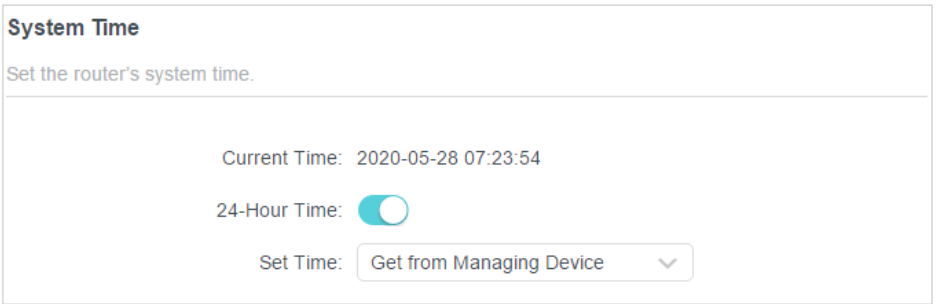


3. Select your local Time Zone from the drop-down list.

4. In the NTP Server I field, enter the IP address or domain name of your desired NTP Server.
5. (Optional) In the NTP Server II field, enter the IP address or domain name of the second NTP Server.
6. Click SAVE.

- **To get time from your computer:**

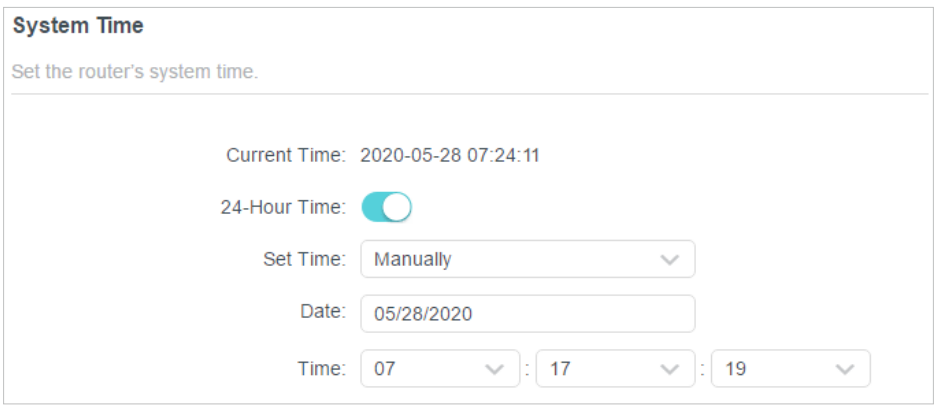
1. In the Set Time field, select Get from Managing Device.



2. The time of your computer will then be displayed and click SAVE.

- **To manually set the date and time:**

1. In the Set Time field, select Manually.



2. Set the current Date (In MM/DD/YYYY format).
3. Set the current Time (In HH/MM/SS format).
4. Click SAVE.

- **To set Daylight Saving Time:**

1. Tick the Enable box of Daylight Saving Time.